

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Canceled)
2. (Previously Presented) The method in accordance with Claim 40, comprising:
applying a torque density (torque per screw/axis distance³) of at least 7 Nm/cm³ to each screw of the extruder.
3. (Previously Presented) The method in accordance with Claim 40, comprising:
applying a torque density (torque per screw/axis distance³) of at least 9 Nm/cm³ to each screw of the extruder.
4. (Currently Amended) The method in accordance with Claim 40, wherein [[the]] Da/Di [[ratio]] is 1.5 to 1.63.
5. (Currently Amended) The method in accordance with Claim 40, wherein the ratio for twin flighted screw elements is $1500 < Am^3/Vf^2 < 2030$.

6. (Previously Presented) The method in accordance with Claim 40, wherein the product to be processed is a polycondensate that is at least one of contaminated and moist.

7. (Original) The method in accordance with Claim 6, wherein the polycondensate to be processed is polyester.

8. (Original) The method in accordance with Claim 7, wherein the polycondensate to be processed is a polyester PET bottle recyclate.

9-14. (Canceled)

15. (Previously Presented) The method in accordance with Claim 40, wherein the elastomer is a powdery or granulated elastomer in which at least one filling agent has already been incorporated.

16. (Currently Amended) The method in accordance with Claim 40, wherein the [[screw]] screws shanks are tightly intermeshing.

17. (Canceled)

18. (Currently Amended) The method in accordance with Claim 40, comprising:

controlling the temperature of [[the]] a core and [[the]] a housing,
wherein the core and housing are both stationary.

19. (Previously Presented) The method in accordance with Claim 18,
comprising controlling the temperature of the core and the housing separately.

20. (Original) The method in accordance with Claim 18, wherein the
housing is divided into segments whose temperature is controlled separately.

21. (Currently Amended) The method in accordance with Claim 40,
wherein the ~~screw shanks~~ screws are arranged in a ring.

22. (Currently Amended) The method in accordance with Claim 6,
comprising during processing applying supplying the polycondensate in a molten
state and later hardening the polycondensate, wherein a total period during which a
temperature of the polycondensate is above a melting temperature of the
polycondensate during processing is less than ~~approx.~~ approximately 60 seconds.

23. (Currently Amended) The method in accordance with Claim 22,
wherein [[a]] the total period during which the temperature of the polycondensate is
above the melting temperature of the polycondensate during processing is less than
roughly approximately 30 seconds.

24. (Original) The method in accordance with Claim 22, wherein a content of residual water in the melt exceeds 200 ppm.

25. (Previously Presented) The method in accordance with Claim 22, wherein, in an initial form, the polycondensate is a bulk material with a bulk density in a range from 200 kg/m³ to 600 kg/m³.

26. (Original) The method in accordance with Claim 22, wherein the polycondensate is present as chips or chippings.

27. (Previously Presented) The method in accordance with Claim 22, comprising partially pre-drying the polycondensate material prior to application in a molten state.

28. (Previously Presented) The method in accordance with Claim 22, comprising:

a degassing step during which volatile contaminations and/or decomposition products are removed from the polycondensate melt.

29. (Original) The method in accordance with Claim 22, wherein the polycondensate is placed in the extruder in a solid state, the polycondensate is heated to a temperature below a melting point, and the polycondensate is degassed and/or dried at a pressure below atmospheric pressure and/or while adding an inert gas.

30. (Original) The method in accordance with Claim 29, wherein a total time during which the polycondensate is in the molten state during the process comprises a first period during which the polycondensate remains in the extruder after application in the molten state and a second period during which the polycondensate, which is still in the molten state, is processed outside of the extruder.

31. (Currently Amended) The method in accordance with Claim 30, wherein a duration of the first period is less than ~~approx.~~ approximately 15 seconds.

32. (Currently Amended) The method in accordance with Claim 30, wherein a duration of the first period is less than ~~approx.~~ approximately 10 seconds.

33. (Original) The method in accordance with Claim 29, wherein processing of the molten polycondensate outside of the extruder includes filtering of the melt.

34. (Previously Presented) The method in accordance with Claim 30, comprising using a melt pump to process the molten polycondensate outside of the extruder.

35. (Previously Presented) The method in accordance with Claim 22, wherein upon hardening, the polycondensate is further processed to form a granulate made up of pellets.

36-39. (Canceled)

40. (Currently Amended) A method for preparation of a product comprising:

supplying the product to a multi-shaft extruder; rotating at least four individually driven, self-cleaning screw shanks screws of the multi-shaft extruder in a common direction about their own axes, each screw shank being arranged in a respective single bore holes hole, and each screw shank having a smooth surface, an outer diameter Da at a screw thread, and an inner diameter Di at a screw base; and

forming a process space having a lateral area Am formed by smooth [[bore]] hole surfaces surface and a free volume Vf formed between [[the]] each screws screw and the [[bore]] hole surfaces surface;

wherein at least a portion of the process space formed by the lateral area Am and the free volume Vf has a ratio Am^3/Vf^2 between 1020 and 3050 for [[two]] twin flighted screw elements [[at a]] when Da/Di ratio of is 1.3 to 1.7.

41. (Previously Presented) The method in accordance with claim 40 wherein the product to be processed is an elastomer.

42. (New) The method in accordance with claim 40 wherein all of the screws are rotated in a common direction.